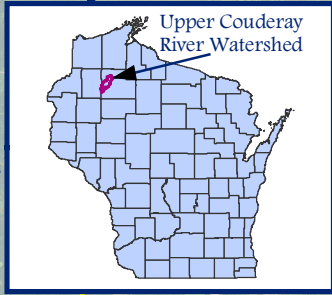
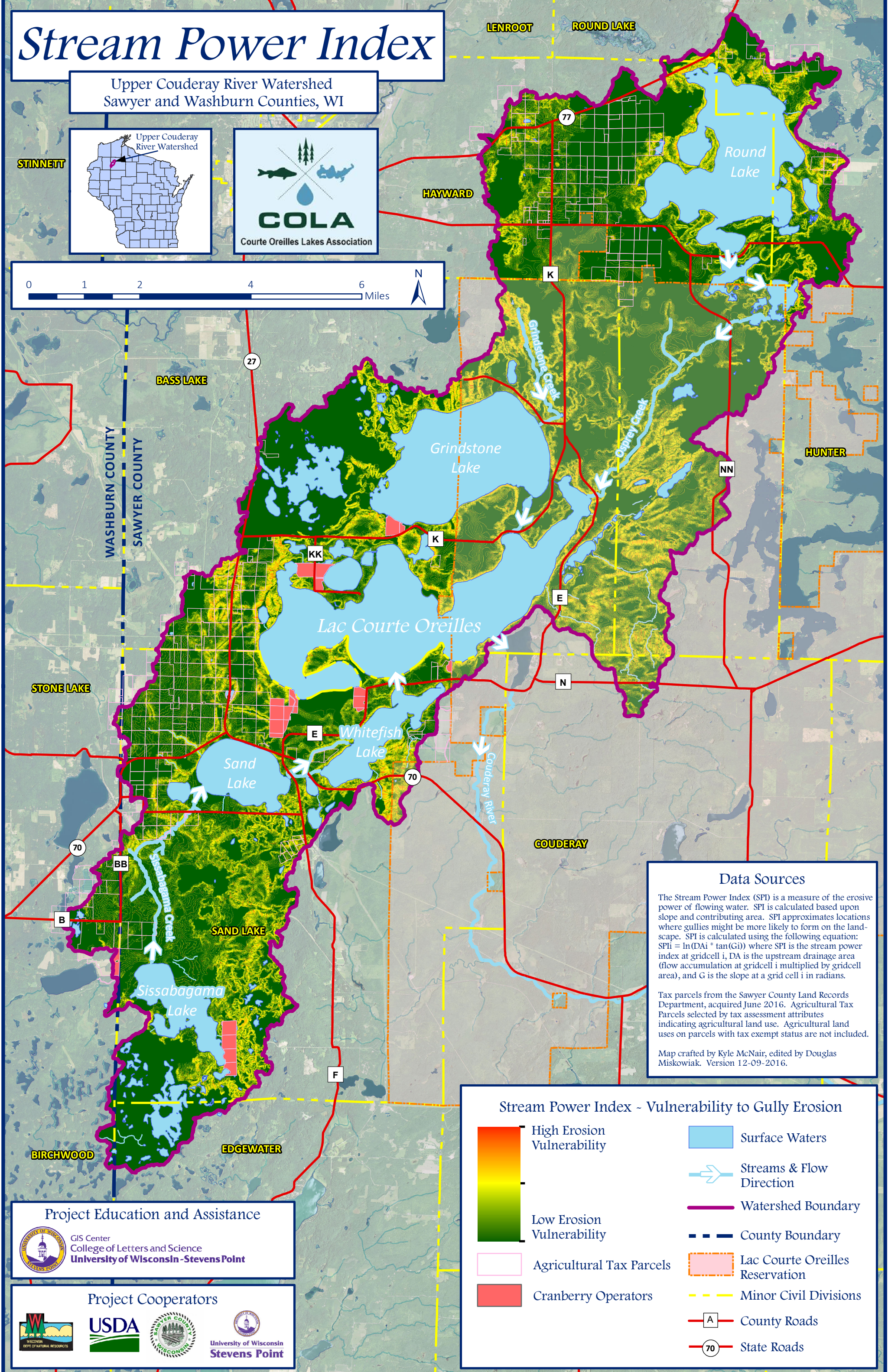


# Stream Power Index

Upper Couderay River Watershed  
Sawyer and Washburn Counties, WI



STINNETT



**Data Sources**

The Stream Power Index (SPI) is a measure of the erosive power of flowing water. SPI is calculated based upon slope and contributing area. SPI approximates locations where gullies might be more likely to form on the landscape. SPI is calculated using the following equation:  $SPI_i = \ln(DA_i * \tan(G_i))$  where SPI is the stream power index at gridcell i, DA is the upstream drainage area (flow accumulation at gridcell i multiplied by gridcell area), and G is the slope at a grid cell i in radians.

Tax parcels from the Sawyer County Land Records Department, acquired June 2016. Agricultural Tax Parcels selected by tax assessment attributes indicating agricultural land use. Agricultural land uses on parcels with tax exempt status are not included.

Map crafted by Kyle McNair, edited by Douglas Miskowiak. Version 12-09-2016.

**Stream Power Index - Vulnerability to Gully Erosion**

	High Erosion Vulnerability		Surface Waters
	Low Erosion Vulnerability		Streams & Flow Direction
	Agricultural Tax Parcels		Watershed Boundary
	Cranberry Operators		County Boundary
			Lac Courte Oreilles Reservation
			Minor Civil Divisions
			County Roads
			State Roads

**Project Education and Assistance**

GIS Center  
College of Letters and Science  
University of Wisconsin - Stevens Point

**Project Cooperators**